

Fig. 1

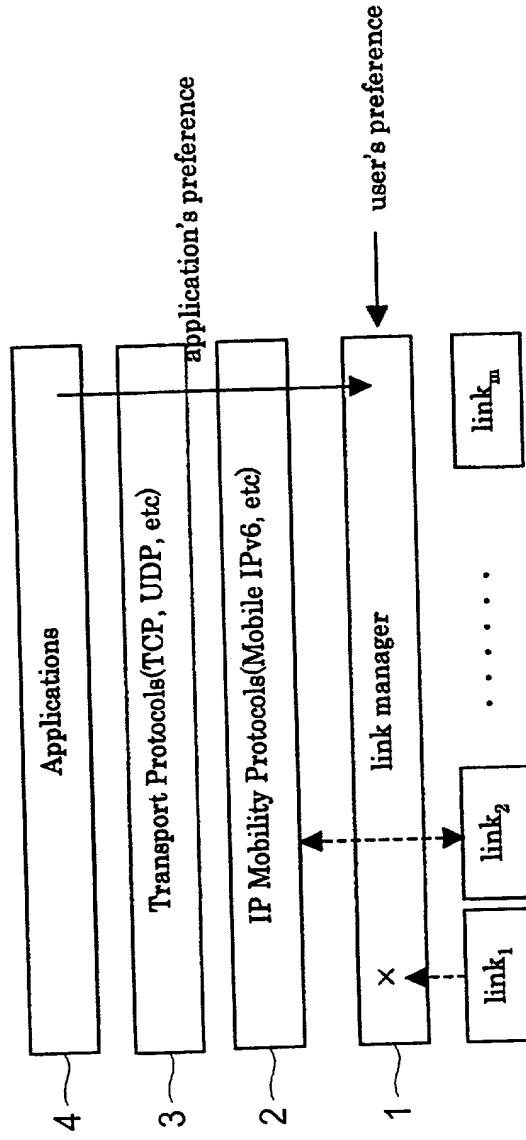


Fig. 2

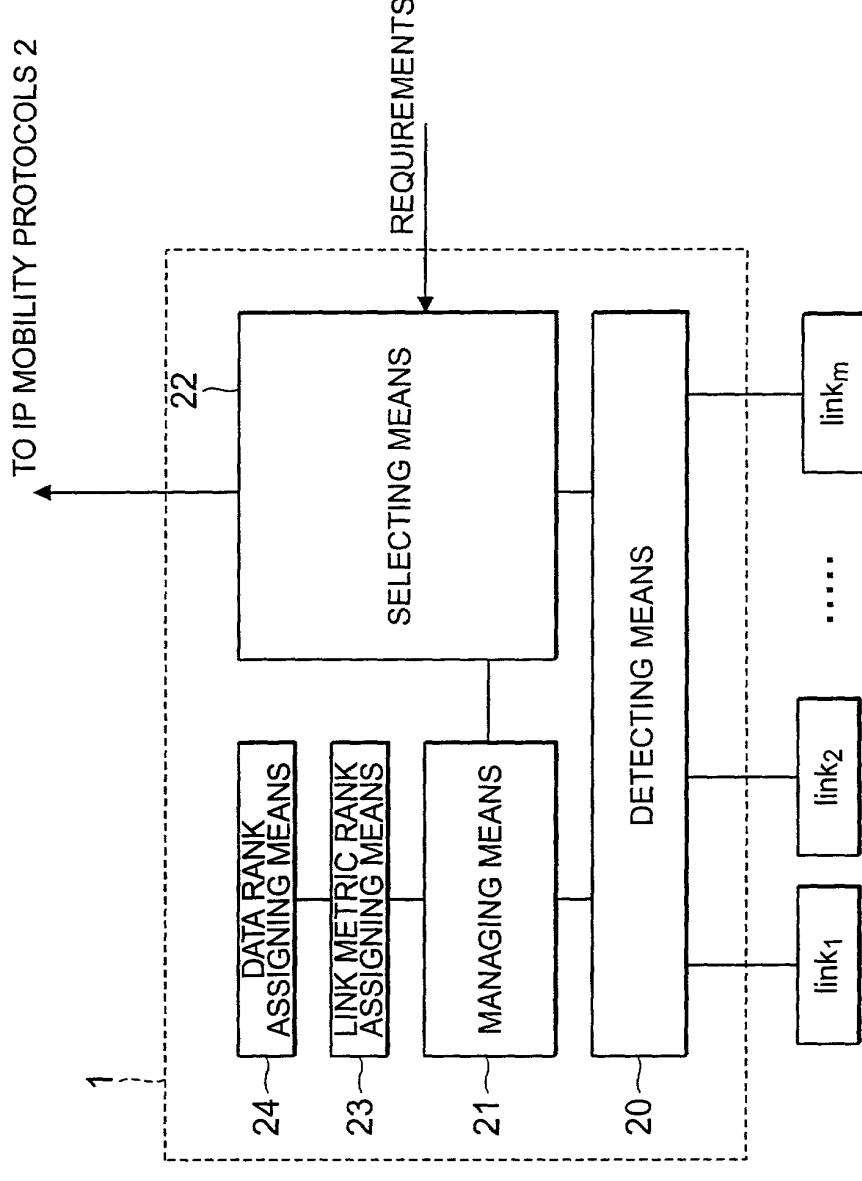


Fig. 3

name	definition	variability
technology standard	standard of link technology	constant
cost	billing scheme(flat/time/usage), cost/billing unit	
link type	wired link or wireless link	
tolerable speed	tolerable speed of host	
QoS support	availability of link-level QoS	
encryption support	availability of link-level packet encryption	
power consumption	power consumption of link interface device	
sleep mode support	availability of low-power consumption mode	
enabled/disabled	indication of enabled or disabled set by user	variable
connectivity	connectivity of link	
throughput	throughput of link	
packet loss rate	packet loss rate of link	
latency	packet transmission latency of link	

Fig.4

preference metric priority for link selection	cost	quality	security	communication time
1	enabled/disabled connectivity	enabled/disabled connectivity	enabled/disabled connectivity	enabled/disabled connectivity
2	cost	throughput	encryption support	power consumption
3	throughput	packet loss rate	cost	sleep mode support
4	packet loss rate	latency	throughput	cost
5	latency	QoS support	packet loss rate	throughput
6	link type	link type	latency	packet loss rate
7	tolerable speed	tolerable speed	link type	latency
8	QoS support	cost	tolerable speed	link type
9	encryption support	encryption support	QoS support	tolerable speed
10	power consumption	power consumption	power consumption	QoS support
11	sleep mode support	sleep mode support	sleep mode support	encryption support
12				

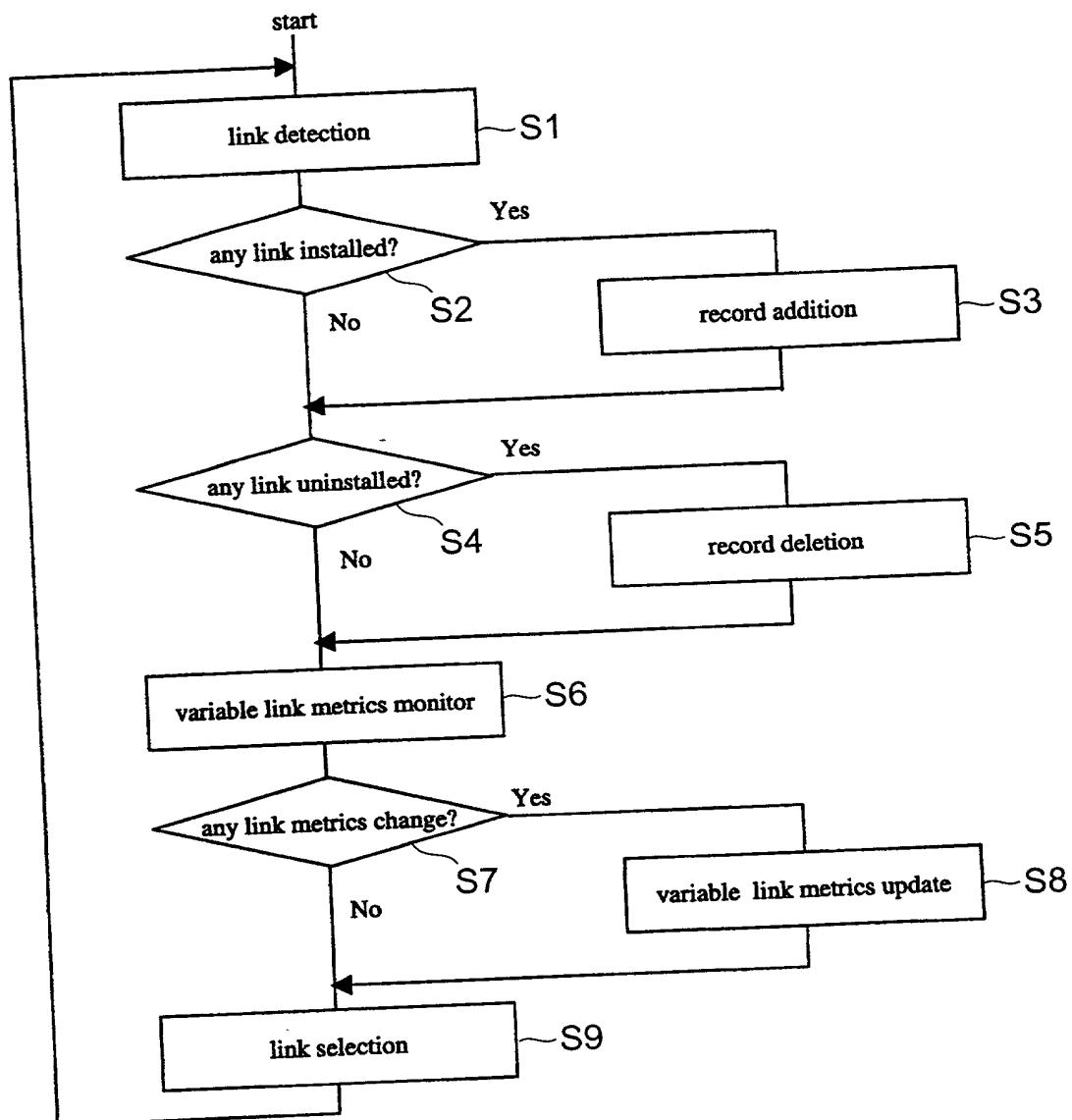
Fig.5

Fig.6

link metrics		record									
technology standard	cost	link type	tolerable speed [km/h]	QoS support	power consumption [W]	sleep mode support	enabled /disabled	connectivity	throughput [bps]	packet loss rate [%]	latency [sec]
IMT-2000	usage-based ¥2/128byte	wireless link	100	no	1	yes	enabled	yes	384K	0.1	0.2
IEEE 802.11	flat rate	wireless link	16	no	yes	0.94	yes	enabled	yes	11M	0.01
dial-up	time-based ¥8.8/3min.	wireless link	0	no	0.65	no	disabled	no	56K	0.0001	0.05
IEEE 802.3z	free	wired link	0	yes	no	14	no	enabled	yes	1G	0.0001

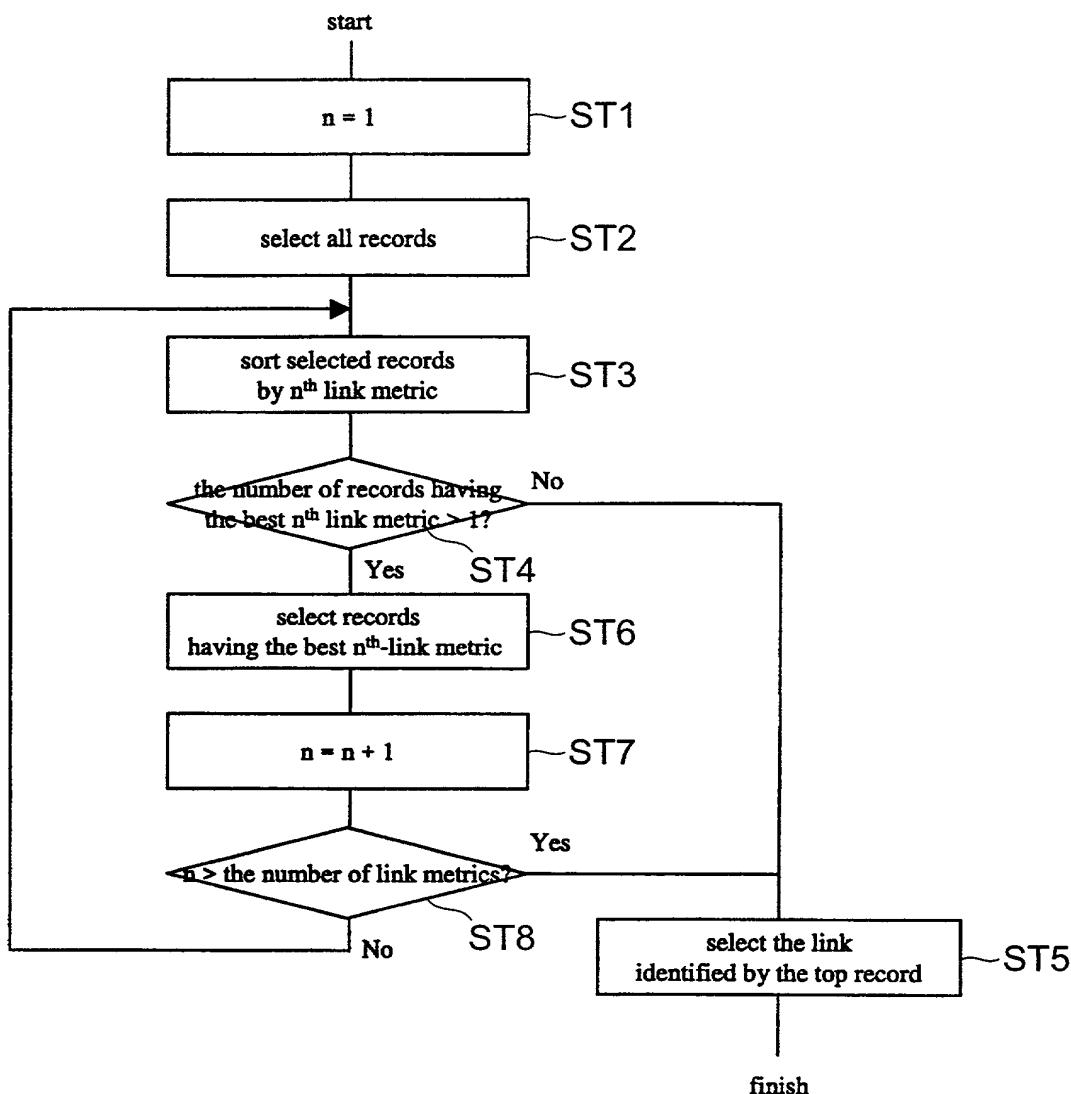
Fig.7

Fig. 8

link metrics	comparison rules
technology standard	N/A
cost	free > flat rate > usage-based > time-based
link type	wireless link > wired link
tolerable speed	high speed > slow speed
QoS support	yes > no
encryption support	yes > no
power consumption	low power consumption > large power consumption
sleep mode support	yes > no
enabled/disabled	enabled > disabled
connectivity	yes > no
throughput	large throughput > small throughput
packet loss rate	low packet loss rate > high packet loss rate
latency	small latency > large latency